

## TITLE 4. CONSERVATION AND NATURAL RESOURCES

### MARINE RESOURCES COMMISSION

#### Final Regulation

REGISTRAR'S NOTICE: The Marine Resources Commission is claiming an exemption from the Administrative Process Act in accordance with § 2.2-4006 A 11 of the Code of Virginia; however, the commission is required to publish the full text of final regulations.

Title of Regulation: **4VAC20-1330. Living Shoreline Group 2 General Permit for Certain Living Shoreline Treatments Involving Submerged Lands, Tidal Wetlands, or Coastal Primary Sand Dunes and Beaches (adding 4VAC20-1330-10 through 4VAC20-1330-50).**

Statutory Authority: § 28.2-104.1 of the Code of Virginia.

Effective Date: November 1, 2017.

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Summary:

*This regulation establishes a general permit that authorizes and encourages the use of living shorelines as the preferred alternative for stabilizing tidal shorelines. The regulation provides for the permitting processes for living shoreline treatments by establishing procedures and qualifications for the general permit and sets forth specific criteria and permit conditions.*

#### CHAPTER 1330

#### LIVING SHORELINE GROUP 2 GENERAL PERMIT FOR CERTAIN LIVING SHORELINE TREATMENTS INVOLVING SUBMERGED LANDS, TIDAL WETLANDS, OR COASTAL PRIMARY SAND DUNES AND BEACHES

##### **4VAC20-1330-10. Purpose.**

The purpose of this general permit is to provide a streamlined permitting process as an incentive to encourage property owners to utilize a living shoreline approach as appropriate, manage shoreline erosion, and promote the planting and growth of tidal wetland vegetation, sand dunes, and beaches to restore or enhance ecosystem services. The techniques and conditions contained in this general permit are designed to limit the applicability of the permit to situations where the projects are most likely to be successful, so as to limit the potential for adverse impacts on the environment and adjoining or nearby properties.

Approval under this general permit constitutes either the commission or the local wetlands board authorization, or both, required in accordance with Chapters 12 (§ 28.2-1200 et seq.), 13 (§ 28.2-1300 et seq.), and 14 (§ 28.2-1400 et seq.) of Title 28.2 of the Code of Virginia. This general permit shall not conflict with or obviate the need to comply with any other federal, state, or local permitting requirements or authorizations governing the proposed activity.

##### **4VAC20-1330-20. Definitions.**

The following words and terms when used in this chapter shall have the following meanings, unless the context clearly indicates otherwise:

"Chairman" means the chairman of a local wetlands board or his designee.

"Commission" or "VMRC" means the Virginia Marine Resources Commission.

"Commissioner" means the Commissioner of Marine Resources or his designee.

"Dune and beach vegetation" means the vegetative species listed in § 28.2-1400 of the Code of Virginia.

"Fetch" means the distance along open water over which wind blows.

"Fiber log" means biodegradable fibrous material often composed of coconut fiber that is formed into rolls of various lengths and thicknesses used for erosion control and as a growing medium.

"Fiber mat" means a biodegradable fibrous material often composed of coconut fiber that is formed into mats of various sizes and thicknesses used for erosion control and as a growing medium.

"Filter cloth" means a geotextile fabric designed to allow water to pass through the membrane while retaining sediments. For purposes of this chapter, filter cloth is typically utilized under sills and marsh toe revetments to minimize settling and along the landward side of marsh toe revetments to minimize sediment loss from the adjacent marsh substrate.

"Grazing protection" means temporary structures consisting of wooden stakes, string lines, netting, and metal cages intended to protect planted wetland vegetation and introduced ribbed mussels from predation.

"Joint Permit Application" means the current Joint Permit Application utilized by the U.S. Army Corps of Engineers, Virginia Marine Resources Commission, Virginia Department of Environmental Quality, and local wetlands boards to evaluate projects involving submerged lands, wetlands, and coastal primary sand dunes and beaches for permit review and any abbreviated application developed specifically for this general permit.

"Living shoreline" means a shoreline management practice that provides erosion control and water quality benefits; protects, restores, or enhances shoreline habitat; and maintains coastal processes through the strategic placement of plants, stone, sand fill, and other structural and organic materials.

"Marsh toe revetment" means an erosion control structure constructed of riprap or shell bags placed immediately channelward of an eroding marsh. A marsh toe revetment is generally utilized to halt the erosion of an existing vegetated marsh that is currently wide enough to provide erosion control benefits.

"Ribbed mussels" means the Atlantic ribbed mussel (*Geukensia demissa*).

"Riprap" means heavy rock utilized to construct sills and revetments.

"Sand dunes and beaches" means the jurisdictional areas meeting the definitions of coastal primary sand dunes and beaches contained in § 28.2-1400 of the Code of Virginia.

"Sill" means a linear erosion control structure constructed of riprap, shell bags, or other approved material placed channelward of and generally parallel to an eroding shoreline. Sand is often placed landward of the sill to raise the elevation of the substrate and facilitate the establishment of wetlands vegetation.

"Shell bags" means net bags of various sizes filled with oyster or clam shells used for erosion control and as a substrate for other organisms.

"Tidal wetlands" or "wetlands" means the jurisdictional area meeting the definition contained in § 28.2-1300 of the Code of Virginia.

"Unaltered shoreline" means a shoreline segment that does not already have an erosion control structure in place.

"Wetlands board" or "board" means a local wetlands board created pursuant to § 28.2-1303 of the Code of Virginia.

"Wetlands vegetation" means the vegetative species listed in § 28.2-1300 of the Code of Virginia.

"Woven containment bag" means a biodegradable bag generally filled with a mixture of sand, gravel, mulch, and soil and planted with wetlands or beach and dune vegetation.

#### **4VAC20-1330-30. Applicability and procedures.**

A. This general permit shall authorize the placement of certain specified sand fill, fiber logs, fiber mats, shell bags, riprap, woven containment bags, and temporary grazing protection in tidal wetlands, beaches, and submerged lands to provide shoreline erosion control while enhancing shoreline habitat and improving the growing conditions for wetlands or dune and beach vegetation. The establishment of oysters and ribbed mussels may be incorporated into the project design.

B. To qualify for this general permit the applicant must submit to VMRC a complete Joint Permit Application or special abbreviated application, any application processing fee required pursuant to Chapter 13 (§ 28.2-1300 et seq.) or Chapter 14 (§ 28.2-1400 et seq.) of Title 28.2 of the Code of Virginia, and any supplemental information deemed necessary by the commission or the applicable wetlands board chairman to fully evaluate the proposal. The commissioner will oversee administration of the provisions of the general permit.

VMRC will forward the application to the Norfolk District of the U.S. Army Corps of Engineers, the appropriate local wetlands board, and the Department of Environmental Quality.

C. The wetlands board and VMRC will review the application concurrently to determine whether:

1. The application is sufficiently complete to allow evaluation.
2. The project satisfactorily meets the general permit criteria.
3. The adjoining property owners to the proposed project have been notified and expressed no opposition to the project.
4. The general permit process is appropriate to use for the specific project.

If the wetlands board chairman and the commissioner determine the proposal affirmatively satisfies all four requirements listed in subdivisions 1 through 4 of this subsection, the commissioner shall issue the general permit. No additional public interest review shall be required. In the event that no comment or request for additional information is received from a wetlands board chairman or designee within 30 days of being provided the application, it shall be assumed the wetlands board has no objection to the issuance of the general permit, and the commissioner may issue the permit.

Should either the wetlands board chairman or the commissioner determine that the proposal does not satisfy all four requirements listed in subdivisions 1 through 4 of this subsection, the general permit process shall not be utilized for the tidal wetlands or coastal primary sand dunes and beaches portions of the project. However, the application may be supplemented with additional information deemed necessary to qualify for the general permit or the proposal could be reviewed in accordance with the applicable standard provisions of Chapters 12 (§ 28.2-1200 et seq.), 13 (§ 28.2-1300 et seq.), and 14 (§ 28.2-1400 et seq.) of Title 28.2 of the Code of Virginia related to submerged lands, wetlands, and coastal primary sand dunes and beaches.

D. In the case when a wetlands board conducts a public hearing and issues a wetlands permit or coastal primary sand dunes and beaches permit and when the subaqueous components of the project satisfy the specific criteria under this regulation, the commissioner may proceed with the issuance of a general permit for the portions of the project involving state-owned submerged lands without the need for further public interest review provided an appeal of the wetlands board decision is not received within the 10-day appeal period provided under §§ 28.2-1311 and 28.2-1411 of the Code of Virginia.

E. Issuance of the general permit does not relieve the permittee from complying with all other applicable local, state, and federal laws and regulations, including those laws and regulations administered by the U.S. Army Corps of Engineers, the Chesapeake Bay Preservation Act (§ 62.1-44.15:67 et seq. of the Code of Virginia), erosion and sediment control ordinances, stormwater management programs, and the Virginia Water Protection Permit program.

#### **4VAC20-1330-40. Specific criteria.**

A. Any project must satisfy the following specific criteria:

1. There is clear evidence of active detrimental erosion at the project site, and the maximum fetch at the project site does not exceed 1.5 miles in any shore angle direction.
2. The maximum water depth at the sill location shall not exceed two feet at mean low water, and the landward edge of the sill shall not be located further than 30 feet channelward of mean low water.
3. The proposal shall include an existing or created tidal wetland with a minimum total width of eight feet.
4. For unaltered shorelines, the project will only qualify for the general permit if the living shoreline components are the only shoreline protection structures proposed along the specific shoreline segment. For previously altered shorelines, an existing erosion control structure will not restrict the use of the general permit for a living shoreline project designed to protect or enhance an existing vegetated wetland provided the resulting vegetated wetlands is at least eight feet in width.
5. Marsh toe revetments and sills shall be constructed of riprap or alternative materials proposed during the review process. The materials shall be of sufficient weight or adequately anchored to prevent being dislodged by anticipated wave action. Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of marsh toe revetments and sills.
6. Marsh toe revetments, sills, and associated sand fill shall not be placed on submerged aquatic vegetation or vegetated wetlands, except sand may be placed on vegetated wetlands if deemed necessary to improve wetlands habitat or resiliency provided the sand placement does not raise the elevation of the site above the elevation of jurisdictional tidal vegetated wetlands and provided further that the project results in a net gain in areal coverage of wetlands vegetation through planting or natural revegetation.
7. Marsh toe revetments and sills shall be constructed on filter cloth and to a maximum height of one foot above the elevation of mean high water at the site. Side slopes of the structures shall be no flatter than 2:1. Broken concrete may be utilized for the core of the structure provided it does not contain exposed rebar or other construction debris and provided it is covered with a layer of riprap stone.

8. Sills shall be designed and constructed with a minimum of one five-foot wide gap or window per property and per 100 linear feet. The maximum height of a window shall not exceed one-half the height of the sill and shall not exceed the elevation of mean high water.

9. Coarse sand should be utilized for any required fill. At a minimum the sand shall contain less than 10% very fine material (passing a #100 sieve). The sand shall not be placed in a manner that raises the elevation of any existing wetland area above the elevation of jurisdictional vegetated tidal wetlands (1.5 times the mean tide range above mean low water).

10. Wetland or dune and beach vegetation shall be planted in all jurisdictional areas on which sand is placed where the resulting substrate elevation is appropriate to support the growth of such vegetation. Only those species that are anticipated to survive at the project site elevation and normal salinity regime shall be used. The common reed, *Phragmites* sp., shall not typically be considered appropriate wetlands vegetation for planting purposes.

11. Fiber logs, fiber mats, woven containment bags, and shell bags may be utilized within the jurisdictional tidal wetlands or sand dunes and beaches to create a sill or to otherwise support the growth of wetlands or dune and beach vegetation provided they are not placed on existing vegetation and are not stacked to a height that exceeds mean high water except along the landward limits of the wetlands or dunes and beaches. The bags, fiber mats, and fiber logs shall be maintained and promptly removed should they become displaced or unexpectedly damaged at any time. If available, biodegradable materials are encouraged. The replacement of any failed fiber logs, fiber mats, or bags in the same location shall be allowed without the need to receive additional authorization. Additional sand may be placed to replace any lost sand or to adjust for substrate settlement, provided the elevation of the originally proposed grade is not exceeded without the need to receive additional authorization.

12. Temporary grazing protection may be utilized to protect wetlands, dune and beach vegetation, or ribbed mussels until they become established. The protective structures shall be removed once the vegetation or mussels are established. Such grazing protection is encouraged and should be considered in the project design. Any requested grazing protection shall be specified in the permit application.

13. The permittee agrees to notify the commission upon completion of the project and to provide a brief monitoring report at the end of the first full growing season following planting and after the second year of establishment of vegetation. The monitoring shall be conducted from June through September of each year, and the report shall include at a minimum the permit number, representative photos of the site, and a brief statement concerning the success of the project. Additional documentation is encouraged to allow improved evaluation of the techniques utilized.

14. Any vegetated wetlands or dune and beach vegetation established under this general permit shall not be cut or harvested. Areas shall be replanted as necessary to ensure, at a minimum, no net loss of wetland or dune and beach vegetation within the project area for a period of two years following the initial planting. If necessary to promote the establishment of wetlands or dune and beach vegetation, additional sand may be placed to restore the originally proposed elevation grade.

15. Any measures taken to eradicate invasive species at the project site associated with the living shoreline activity, including *Phragmites* sp., shall be noted in the permit application or conducted in accordance with a plan evaluated and approved by the applicable wetlands board

or locality. Such plans shall include measures to revegetate the area with appropriate native wetlands vegetation.

B. All activities undertaken in accordance with the general permit are subject to the enforcement and penalty provisions contained in Article 2 (§ 28.2-1210 et seq.) of Chapter 12, Article 4 (§ 28.2-1316 et seq.) of Chapter 13, and Article 4 (§ 28.2-1416 et seq.) of Chapter 14 of Title 28.2 of the Code of Virginia. Failure to comply with any criteria or conditions of the general permit constitutes a violation of the permit.

#### **4VAC20-1330-50. Permit conditions.**

Permits issued are subject to the following conditions:

1. The project authorized by this general permit shall be completed within two years of the issuance of the permit. Upon written request by the permittee prior to the permit expiration date, the permit may be extended to allow completion of the work. All other conditions remain in effect until revoked by the commission, wetlands board, or the General Assembly.
2. This permit grants no authority to the permittee to encroach on property rights, including riparian rights, of others.
3. The duly authorized agents of the commission and the applicable local government shall have the right to enter upon the premises at reasonable times for the purposes of inspecting the work authorized by the permit and to evaluate compliance with the terms and conditions of the permit. Although the general permit is issued by the commissioner, the applicable local wetlands board retains jurisdiction and may enforce violations and any nonconformance with the permit occurring within tidal wetlands and coastal primary sand dunes and beaches.
4. The permittee shall comply with all applicable federal, state, and local laws, ordinances, rules, and regulations concerning the project, specifically including those related to the U.S. Army Corps of Engineers, water quality standards, erosion and sedimentation control, the Chesapeake Bay Preservation Act, the Stormwater Management Act, and the Virginia Water Protection Permit Program. The granting of this permit shall not relieve the permittee of the responsibility of obtaining any and all other permits or authorization for this project.
5. The permit shall not affect or interfere with the right vouchsafed to the people of Virginia concerning fowling and the catching of and taking of oysters and other shellfish in and from the waters not included within the terms of the permit.
6. The permittee shall to the greatest extent practicable minimize adverse impacts of the project on adjacent properties and wetlands and upon the natural resources of the Commonwealth.
7. The permit may be revoked at any time by the commission upon the failure of the permittee to comply with the terms and conditions hereof or at the will of the General Assembly of Virginia.
8. Any portion of the waters within the boundaries of the Baylor Survey is expressly excluded from this permit.
9. This permit is subject to any lease of oyster planting ground in effect on the date of the permit. Nothing in the permit shall be construed as allowing the permittee to encroach on any lease without the consent of the leaseholder. The permittee shall be liable for any damages to such lease.
10. The issuance of this permit does not confer upon the permittee any interest or title to the submerged lands.

11. All structures authorized by this permit that are not maintained in good repair or are displaced to areas not authorized shall be completely removed within 30 days after notification by the commission or its designated representatives.

12. The permittee agrees to comply with all the terms and conditions as set forth in this permit and that the project will be accomplished within the boundaries as outlined in the plans attached to this permit. Any encroachment beyond the limits of this permit shall constitute a Class 1 misdemeanor.

13. This permit authorizes no claim to archaeological artifacts that may be encountered during the course of construction. If, however, archaeological remains are encountered, the permittee agrees to notify the commission, which will subsequently notify the Department of Historic Resources. The permittee further agrees to cooperate with agencies of the Commonwealth in the recovery of archaeological remains if deemed necessary.

14. The permittee agrees to indemnify and save harmless the Commonwealth of Virginia and any applicable locality from any liability arising from the establishment, operation, or maintenance of said project.

15. This general permit shall be retained by the permittee for the duration of the project as evidence of authorization and shall not be transferred without the written consent of the commissioner.

NOTICE: The following form used in administering the regulation was filed by the agency. The form is not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of the form with a hyperlink to access it. The form is also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, 900 East Main Street, 11th Floor, Richmond, Virginia 23219.

FORMS (4VAC20-1330)

[Tidewater Joint Permit Application \(JPA\) for Projects Involving Tidal Waters, Tidal Wetlands, and/or Dunes and Beaches in Virginia \(rev. 5/2017\)](#)

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